

34. The test set of claim 28, wherein the test set is configured to test respective ends of an xDSL loop with one of a central office xDSL modem and a remote xDSL modem that also corresponds to the particular type of xDSL modem.

35. The test set of claim 32, wherein the xDSL modem module is configured as a plug-in card.

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36. The test set of claim 32, wherein the xDSL modem module includes a stored identification value, wherein the test set reads the stored identification value when the xDSL modem module is attached to the test set, and wherein the test set performs xDSL tests that relate to the stored identification value.

REMARKS

Claims 1-7, 12-19, 22-25 and 28-34 were pending. Claims 1, 16, 22, 28 and 32 have been amended. Claims 5 and 31 have been canceled without prejudice. New claims 35-36 have been added to further claim applicants' invention. It is respectfully submitted that such amendments and new claims are supported by the application as originally filed and that no new matter has been entered. Claims 1-4, 6-7, 12-19, 22-25, 28-30 and 32-36 are now pending.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102

The Examiner rejects claims 1-4 and 6 under 35 U.S.C. § 102(b) as being anticipated by Ernst et al., U.S. Patent No. 5,381,348.

CLAIM REJECTIONS UNDER 35 U.S.C. § 103

The Examiner rejects claims 7, 12-19, 22-25, 28-30 and 33-34 under 35 U.S.C. § 103 as being unpatentable over Ernst et al. in view of Kahkoska et al., U.S. Patent No. 6,002,671.

ALLOWABLE SUBJECT MATTER

The Examiner states that claim 5 would be allowable if rewritten in independent form. (It is noted that on the Office Action Summary that the Examiner indicated that claims 31-32 are objected to; that is, would be allowable if rewritten in independent form.)

Thus, it is assumed that claims 5 and 31-32 would be allowable if rewritten in independent form. In accordance with such assumption, the features of claim 5 have been added to claims 1, 16 and 22. (As the amendments to claims 1, 16 and 22 are merely to add allowable features, no narrowing of the range of equivalents is conceded, under Festo.) It is respectfully submitted that claims 1, 16 and 22 are now allowable. It is further respectfully submitted that their respective dependent claims 2-4, 6-7, 12-15, 17-19 and 23-25 are now allowable.

The features of claim 31 have been added to claim 28. It is respectfully submitted that claim 28 is now allowable. It is further respectfully submitted that its dependent claims 29-30 and 33-34 are now allowable.

Claim 32 has been rewritten in independent form. It is respectfully submitted that claim 32 is now allowable.

NEW CLAIMS

New claims 35-36 have been added to further claim applicants' invention. (Note that claims 5 and 31 have been canceled without prejudice so that the number of canceled claims corresponds to the number of newly-presented claims. See MPEP § 714.13.) Claim 35 corresponds to claim 29 dependent from claim 32. Claim 36 corresponds to claim 30 dependent from claim 32. It is respectfully submitted that claims 35-36 are allowable as claims dependent from claim 32, which is allowable as discussed above.

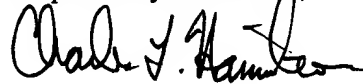
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CONCLUSION

In view of the foregoing, the applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is urged. If the Examiner believes a telephone conference would aid in the prosecution of this case in any way, please call the undersigned at 650-326-2400.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Charles Hamilton", written over a horizontal line.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Claims 5 and 31 have been canceled without prejudice. Claims 35-36 are new.
Claims 1, 16, 22, 28 and 32 have been amended.

1. (Amended) A test set for testing a communications network comprising:
at least one signal input port;
test circuitry coupled to the at least one signal input port, the test circuitry
receiving signals from the signal input port and generating test data;
a processor coupled to the test circuitry, the processor receiving test data and
generating test results;
a user input device coupled to the processor, the user input device sending
commands to the processor; and
a display operatively coupled to the processor, the display receiving and showing
the test results,
wherein the test set is capable of performing line qualification and connectivity
[testing.] testing, wherein the connectivity testing includes bit-error-rate testing and loopback
testing.

16. (Amended) A telecommunications transmission test set comprising:
at least one signal input port;
test circuitry coupled to the at least one signal input port, the test circuitry
receiving signals from the signal input port and generating test data;
a processor coupled to the test circuitry, the processor receiving test data and
generating test results;

a modem module operatively coupled to the processor, wherein the modem module, when directed, receives and processes the test data to generate processed results, and wherein the processor generates the test results based, in part, on the processed results;

a user input device coupled to the processor, the user input device sending commands to the processor; and

a display coupled to the processor, the display receiving and displaying the test results,

wherein the test set is configurable to perform line qualification or connectivity testing as selected by a command received from the user input [device.] device, wherein the connectivity testing includes bit-error-rate testing and loopback testing.

22. (Amended) A test set for testing a communications network comprising:
a master tester unit for receiving a signal from the communications network and processing the signal to produce intermediate results; and

a modem module coupled to the master tester unit, wherein the modem module receives and processes the intermediate results and provides the processed results to the master tester unit,

wherein the test set is configurable to perform line qualification and connectivity testing, and wherein the master tester unit displays the processed [results.] results, wherein the connectivity testing includes bit-error-rate testing and loopback testing.

28. (Amended) A test set for testing a digital subscriber line (xDSL) communications network, comprising:

at least one xDSL signal input port that connects the test set to the xDSL communications network;

line qualification test circuitry, coupled to the at least one xDSL signal input port, that performs line qualification testing on the xDSL communications network;

an xDSL modem module that attaches removably to the test set, wherein the xDSL modem module emulates a particular type of xDSL modem, enabling the test set to test the xDSL communications network in accordance with the particular type of xDSL modem;

an internal bus that couples the line qualification test circuitry and the xDSL modem module;

a processor, coupled to the internal bus, that operates with the line qualification test circuitry to selectively generate line qualification test data, and with the xDSL modem module to selectively generate xDSL connectivity test data, and that selectively processes the line qualification test data and the xDSL connectivity test data, in accordance with a user selection; and

a display unit, coupled to the internal bus, that selectively displays one or more of the line qualification test data and the xDSL connectivity data in accordance with the user [selection.] selection.

wherein the test set stores a software program and executes selected portions of the software program as determined by the xDSL modem module emulating the particular type of xDSL modem.

32. (Amended) [The test set of claim 28,] A test set for testing a digital subscriber line (xDSL) communications network, comprising:

at least one xDSL signal input port that connects the test set to the xDSL communications network;

line qualification test circuitry, coupled to the at least one xDSL signal input port, that performs line qualification testing on the xDSL communications network;

an xDSL modem module that attaches removably to the test set, wherein the xDSL modem module emulates a particular type of xDSL modem, enabling the test set to test the xDSL communications network in accordance with the particular type of xDSL modem;

an internal bus that couples the line qualification test circuitry and the xDSL modem module;

a processor, coupled to the internal bus, that operates with the line qualification test circuitry to selectively generate line qualification test data, and with the xDSL modem module to selectively generate xDSL connectivity test data, and that selectively processes the line qualification test data and the xDSL connectivity test data, in accordance with a user selection; and

a display unit, coupled to the internal bus, that selectively displays one or more of the line qualification test data and the xDSL connectivity data in accordance with the user selection,

wherein the test set is configured as a master test set and a second test set is configured as a slave test set, wherein the xDSL modem module of the master test set and the xDSL modem module of the slave test set both emulate the particular type of xDSL modem, and wherein the master test set and the slave test set each perform respective functions to test the xDSL communications network.